GWP™600
Fiberglass Wrap Plain 600

AFZIR Retrofitting Solution
مقاوم‌سازی افزیـــر

PRODUCT DESCRIPTION
GWP™600 is a bidirectional E-glass fiber fabric with fiber oriented in the 0° direction and additional glass cross fibers at 90° and produced by PRC. GWP™600 is field laminated using environmentally friendly, two-part 100% solids and structural adhesives to form a glass fiber fabric system used to reinforce and protect structural elements. GWP™600 is used primarily for hand lay-up, airless and air-assisted sprayer and press molding of FRP parts.

PRODUCT USES
GWP™600 strengthening systems can be used to resolve corrosion, lining, strength deficiencies and increase the load carrying capacity of building, bridges, silos, tanks, chimneys, and other structures.

PRODUCT FEATURES
- High tensile strength
- Good reinforce and protect structural elements
- Allowing for use in hand lay-up process to produce large-area parts
- Superior acid corrosion resistance
- Strengthening the steel and concrete pipes, silos, chimneys and tanks.
- Compatible with different resins such as: Epoxy Resin, Polyester, Phenolic, Polyurethane and Vinylester

HOW TO USE
DESIGN
Design values will vary based on project requirements and applicable environmental and strength reduction factors. Contact our company to determine applicable design factors.

TECHNICAL DATA & FIBER PROPERTIES (DRY)

Arial Weight	600 gr/m^2
Color	White
Density	2.55 gr/cm^3
Penetrating Time	60 sec
Weave Pattern	Plain
Primary Fiber Direction	0° (Bidirectional) 90° (Bidirectional)
Application Methods	Hand lay-up Spray machine Robot processes
Compatible Resins	Epoxy, Polyester, Phenolic, Polyurethane, Vinylester
Shelf Time	10 years
Storage Conditions	Store dry at 4°C – 40°C

SURFACE PREPARATION
- Surfaces to receive GWP™600 must be clean and sound. It must be dry and free of protrusions and frost. All dust, laitance, grease, curing compounds, waxes, deteriorated materials, and other bond inhibiting materials must be removed from the surface prior to application.
- Existing uneven surfaces must be filled with appropriate epoxy putty or repair mortar. In certain applications and at the engineer's discretion, the bond between the substrate and the fabric may be determined to be non-critical (such as in column confinement applications).
- All corners must be rounded to 30 mm radius minimum. A minimum overlap [or lap splice] of 100-200 mm is required to achieve continuity. The minimum adhesive strength of the concrete may be greater than 18 MPa.

Glass Wrap Plain - GWP™600

CUTTING
Fabric can be cut to appropriate length by using a commercial quality heavy-duty scissors.

APPLICATION
- Installation of the GWP™600 strengthening system should be performed only by a specially trained, approved contractor.
- The GWP™600 strengthening system shall consist of GWP™600 glass fabric and epoxy resins such as: EPS™10010 and EPT™10020.
- Note the specified number of plies, ply widths, and fiber orientation. Mix resin components using recommended procedures on product datasheet. Apply one coat of epoxy as a primer to the surface using a nap roller. Fill minor concrete or steel defects such as bug holes and other imperfections with epoxy putty or epoxy mixed with fumed silica or talc or calcium carbonate powder (thickened epoxy). Where the resin sags, can also be used one of these three materials. Apply putty or thickened epoxy using a roller or trowel to primed surface. Adjust the gap between saturator rollers. Using the saturator machine or hand lay-up method, pre-saturate the appropriate length of GWP™600 with AFZIR epoxy adhesive as a saturant. Install the saturated FRP sheet. Use a rib roller to remove all air pockets and ensure intimate contact with the surface. If a splice is needed, a minimum 100-200 mm overlap is required. On multiple plies with splices, stagger the splice locations. If required, apply topcoat material.

LIMITATIONS
- Concrete deterioration and steel corrosion must be resolved prior to application
- Minimum application temperature is 4°C

PACKAGING
Fabric rolls: 40kg
1 m Width x 66 m Length

STORAGE
Unless otherwise specified, it should be stored in a dry,

cool and rain-proof area. It is recommended that the room temperature and humidity should be always maintained at 4℃～40℃ and below 75% respectively.

HANDLING

Approved personal protection equipment should be worn at all times. Particle mask is recommended for possible airborne particles. Gloves are recommended when handling fabrics and resins to avoid skin irritation. Safety glasses are recommended to prevent eye irritation. Wear chemical resistant clothing/gloves/goggles. Ventilate area. In absence of adequate ventilation, use properly fitted respirator.

CLEANUP

Dispose of material in accordance with local disposal regulations. Uncured material can be removed with approved solvents. Cured materials can only be removed mechanically.

FIRST AID

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water; contact physician immediately. For respiratory problems, remove to fresh air. Wash clothing before reuse.

DISCLAIMER OF LIABILITY

AFZIR, LLC warrants its products to be free from manufacturing defects. Buyer determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to replacement of product. Any claim for breach of this warranty must be brought within six months of the date of purchase.

AFZIR shall not be liable for any consequential or special damages of any kind, resulting from any claim or breach of warranty, breach of contract, negligence or any legal theory.

The Buyer, by accepting the products described herein, agrees to be responsible for thoroughly testing any application to determine its suitability before committing to production.